

#### AMENDMENTS TO THE CLAIMS

In the claims, please cancel claims 2, 3, 11-13, 16 and 17, and amend claim 18 as follows:

1. (original) A process for delivering a polynucleotide complexed with a compound into an extravascular muscle cell of a mammal, comprising:
  - a) mixing the polynucleotide and a polymer to form a complex wherein the zeta potential of the complex is not positive;
  - b) inserting the polynucleotide into a mammalian blood vessel, in vivo;
  - c) increasing the permeability of the blood vessel;
  - d) passing the complex through the blood vessel;
  - e) delivering the complex into the mammalian muscle cell; and,
  - f) expressing the polynucleotide.
2. (canceled)
3. (canceled)
4. (original) The process of claim 1 wherein increasing the permeability of the vessel consists of increasing pressure against vessel walls.
5. (original) The process of claim 4 wherein increasing the pressure consists of increasing a volume of fluid within the vessel.
6. (original) The process of claim 5 wherein increasing the volume consists of inserting the polynucleotide in a solution into the vessel.
7. (original) The process of claim 1 wherein the muscle cell is a skeletal muscle cell.
8. (original) The process of claim 7 wherein the skeletal muscle cell is a limb muscle cell.
9. (original) The process of claim 1 wherein the compound is selected from the group consisting of histone, PEI, cationic lipid, poly-L-lysine, histone-lipid, histone-polyamine, and protamine.
10. (original) The process of claim 1 wherein the zeta potential of the complex is negative.
- 11-13. (cancelled)
14. (original) A process for delivering a polynucleotide complexed with a compound into an extravascular liver cell of a mammal, comprising:
  - a) mixing the polynucleotide and a polymer to form a complex wherein the zeta potential of the complex is not positive;
  - b) inserting the polynucleotide into a mammalian blood vessel, in vivo;
  - c) increasing the permeability of the blood vessel;
  - d) passing the complex through the blood vessel;

- e) delivering the complex into the mammalian muscle cell; and,
  - f) expressing the polynucleotide.
15. (original) The process of claim 14 wherein the liver cell consists of an hepatocyte.
16. (canceled)
17. (canceled)
18. (currently amended) The process of claim ~~17~~ 14 wherein increasing the permeability of the vessel consists of increasing pressure against vessel walls.
19. (original) The process of claim 18 wherein increasing the pressure consists of increasing a volume of fluid within the vessel.
20. (original) The process of claim 19 wherein increasing the volume consists of inserting the polynucleotide in a solution into the vessel.
21. (original) The process of claim 14 wherein the compound is selected from the group consisting of histone, PEI, cationic lipid, poly-L-lysine, histone-lipid, histone-polyamine, and protamine.
22. (original) The process of claim 14 wherein the zeta potential of the complex is negative.